



# AGRICULTURAL LENDER SURVEY

## SPRING 2017 REPORT

**KANSAS STATE**  
**UNIVERSITY**

Agricultural Economics

*Semi-annual survey of agricultural lenders from across the nation.*

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# TABLE OF CONTENTS

## Contents

Executive Summary _____	1
Survey Overview and Demographic Information _____	2
Interest Rates _____	3
Spread Over Cost of Funds _____	4
Farm Loan Volume _____	5
Non-Performing Loans _____	7
Land Values _____	10
Author Information _____	11

# AGRICULTURAL LENDER SURVEY

## Executive Summary

### INTEREST RATES

Seventy two percent of survey respondents expectations increased for farm real estate loans. No change in interest rates over the past three months. Ninety two percent of survey respondents expect interest rates to increase in the short-term with 96% expecting this trend to continue in the next two to five years.

### SPREAD OVER COST OF FUNDS

Spread over cost of funds reversed its previous declining trend for all loan categories with more respondents indicating an increase. This indicates less competition in the agricultural banking sectors.

### FARM LOAN VOLUME

Demand for all three types of farm loans remains high; however, relative to previous quarters, fewer lenders indicated an increase for all loan categories except for farm real estate. Most notably, lenders indicated less demand overall for intermediate loans.

### NON-PERFORMING LOANS

Lenders once again reported increasing rates of non-performing loans experienced over the last three months. Expectations for the short and long-term still indicate increasing non-performing loans but this sentiment is not as strong as in previous surveys.

### LAND VALUES

More lenders still report falling farmland values over the past three months. However, the percentage reporting that land values stayed the same increased 28 percentage points indicating that land values may be steadying for the time being.

## Survey Overview and Demographic Information

### PURPOSE

The Department of Agricultural Economics at Kansas State University conducts a semi-annual survey of Agricultural Lenders to gauge the recent, short term and long term future assessment of the credit situation for production agriculture. The results provide a measure of the health of the sector in a forward looking manner.

Each institution surveyed provided their sentiment on the current and expected state of five key areas: (1) farm loan interest rates; (2) spread over cost of funds; (3) farm loan volumes; (4) non-performing loan volumes; and (5) agricultural land values. Within each of these key areas, different loan types were assessed (farm real-estate, intermediate and operating loans) as well as the different agricultural sectors (corn and soybeans, wheat, beef, dairy, etc.).

The survey responses are summarized using a diffusion index. This index is calculated by taking the percentage of those indicating increase minus the percentage of those indicating decrease plus 100. Therefore, an index above (below) 100 indicates respondents expect or experienced an increase (decrease) in the measure of interest. For example, on page 4, the graph for “Farm Real Estate Loans Interest Rates” illustrates that the index for Spring 2017 expected short term farm real estate equals 192. This number represents the fact that 92 more percentage points of lenders believe that farm real estate interest rates would increase in the short run rather than those that believe rates will go down. This number may also be calculated by using the numbers in A2. Table A2 shows that 92% of respondents indicated an increase in short term Farm Real Estate Loan interest rates while 0% indicated a decrease.

# AGRICULTURAL LENDER SURVEY

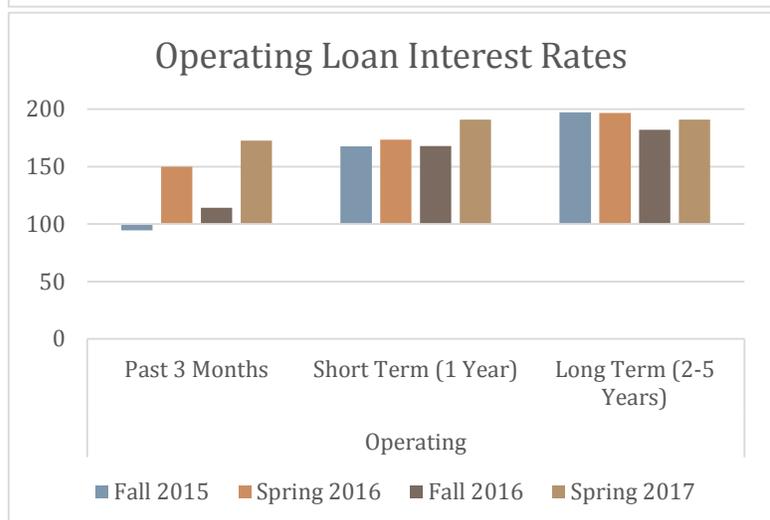
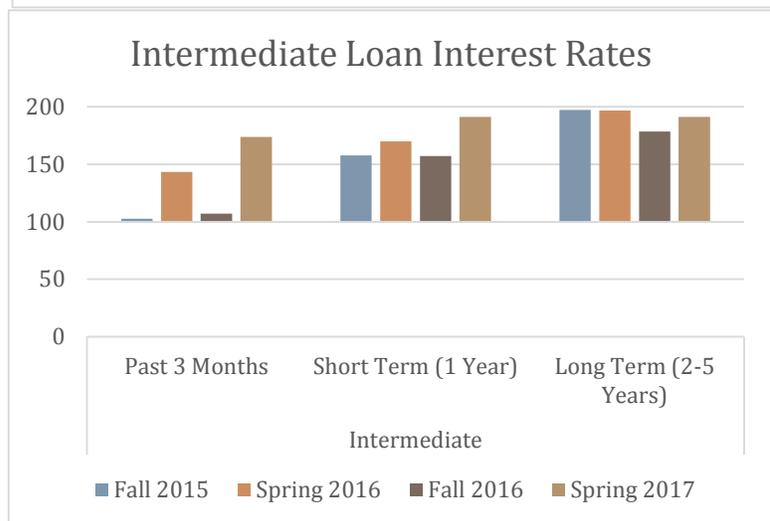
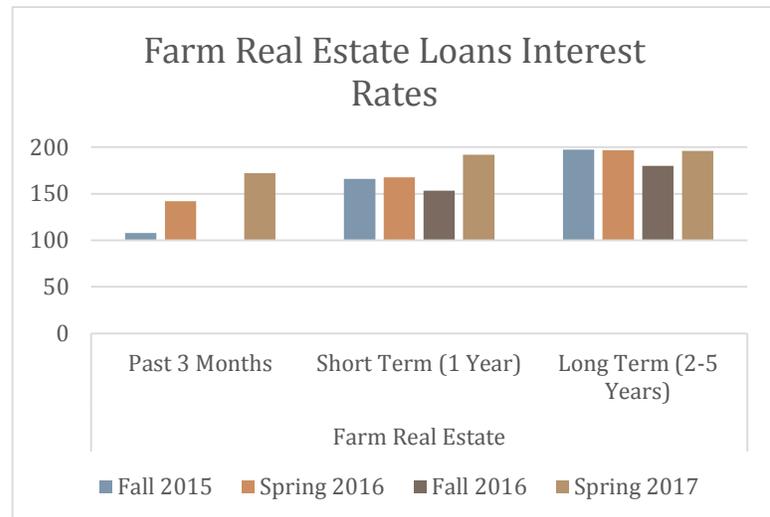
## Interest Rates

The three figures to the right show the last 4 periods of lender expectations of interest rates for farm real estate loans, intermediate loans and operating loans. All lenders are asked what they experienced over the past three months as well as his/her expectations for the short term and long term.

Over all three loan categories, lenders indicated increasing interest rates over the past three months. Seventy-two percent of respondents indicated increasing interest rates for farm real estate loans (Table 2).

In the short and long-term, lenders continue to expect interest rate increases as the FOMC has stated they plan to raise the federal funds rate in the future.

For a complete history of the expectations lenders have had for interest rates please see Figure A1 at the back of this report.



# AGRICULTURAL LENDER SURVEY

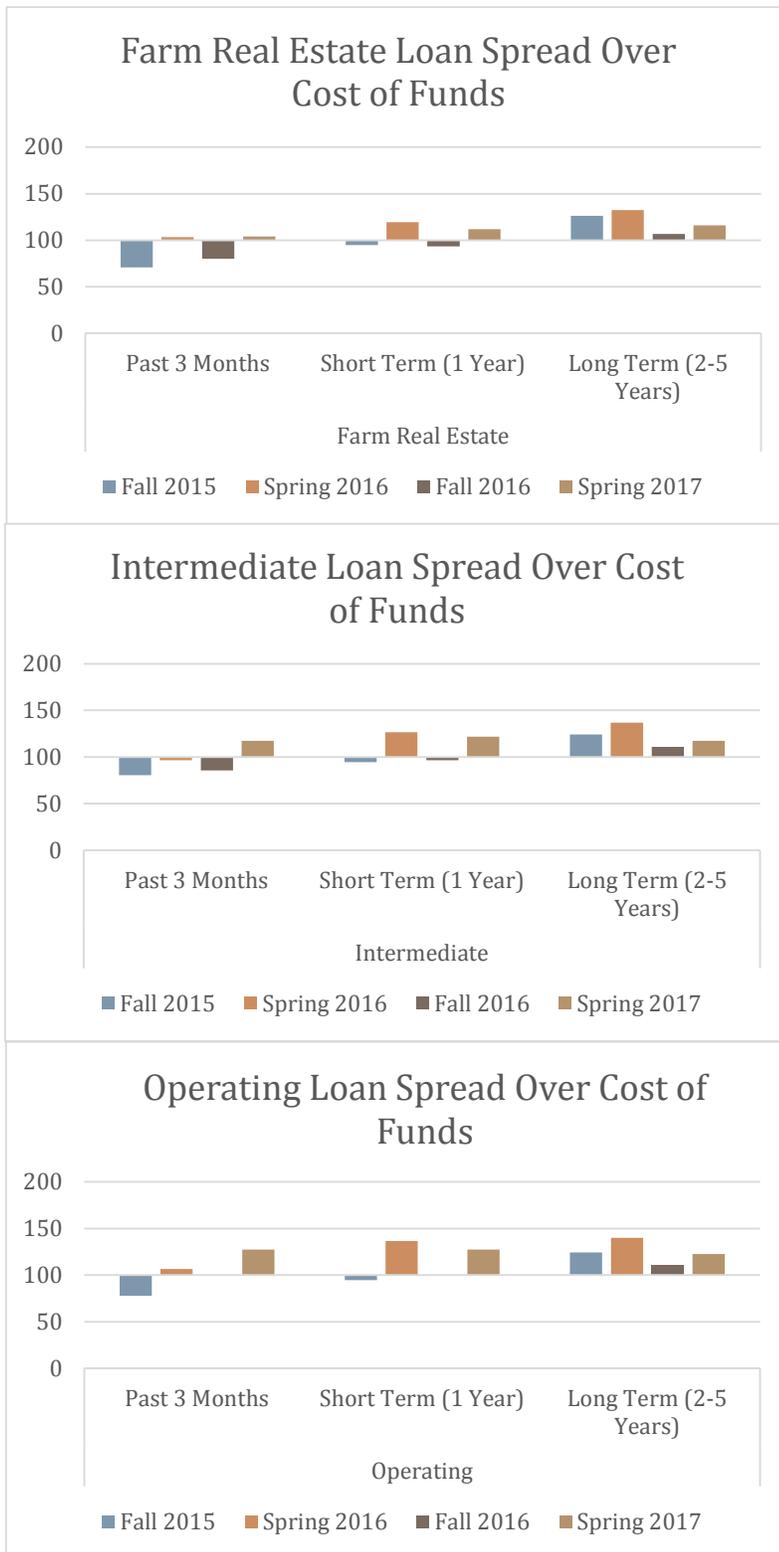
## Spread Over Cost of Funds

The spread over cost of funds is the difference between the loan interest rates charged by the lending institution and the interest rate paid by the financial institution for the funds that they deploy in their business. The reason for obtaining information for both loan interest rates and spread over cost of funds is to gauge competition in the agricultural lending market. A decrease in the spread over cost of funds suggests competition for agricultural loans among lending institutions may be increasing.

Respondents indicated an increase in spread over cost of funds for farm real estate loans, intermediate loans, and operating loans. These numbers indicate a decrease in competition within the agricultural credit market with increasing margins for lending institutions.

In the short term and long term, lenders expect spread over cost of funds to increase meaning agricultural lending would continue to be more profitable for lending institutions in the future.

The historical responses to spread over cost of funds are at the back of this document in Figure A2.



# AGRICULTURAL LENDER SURVEY

## Farm Loan Volume

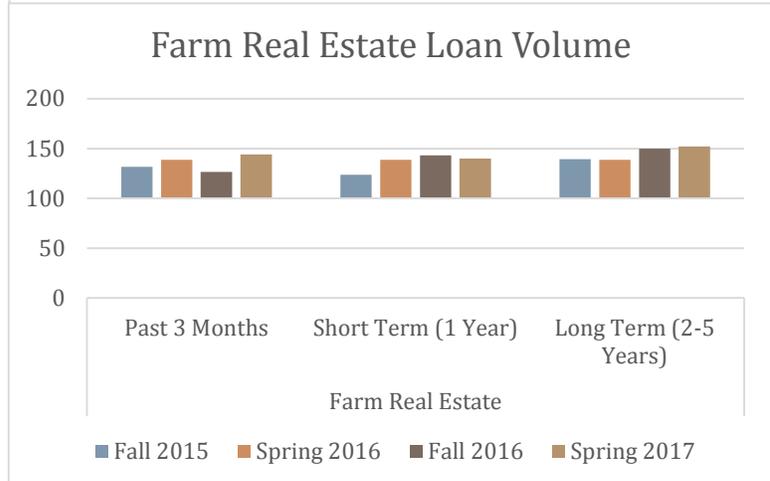
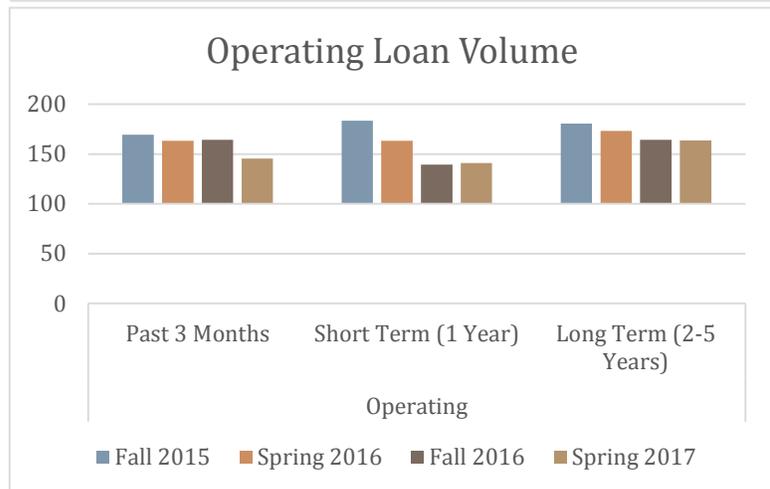
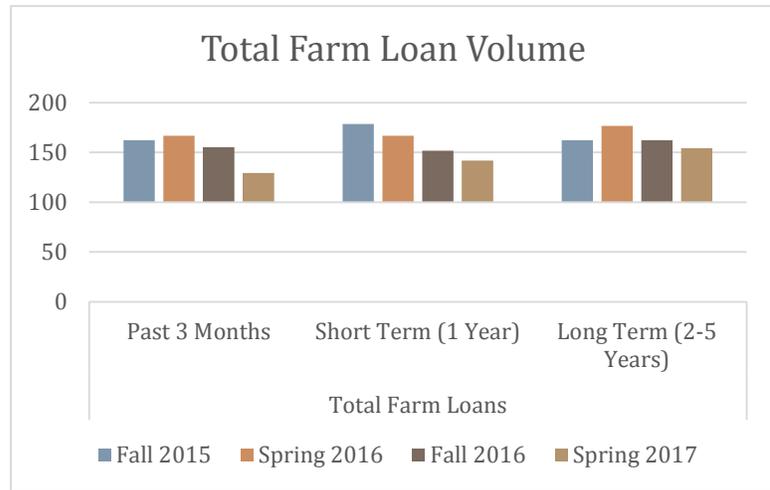
Farm loan volume measures the demand for money in production agriculture. The respondents are asked about four different categories of loans: total, farm real estate, intermediate, and operating.

Agricultural lenders expect demand for total farm loans to increase in both the short term and long term. Demand for all loan categories except for intermediate loans increased.

Demand for farm real estate loans increased over the past three months for all loan categories except intermediate loans. This coincides with a fewer lenders reporting decreases in farmland values in their loan service territory (see land values). Demand for farm real estate has increased slightly.

Expectations of operating loan volumes remain high, albeit at slightly lower levels than Fall 2016. Many lenders are expecting a high demand for operating lines of credit due to a deterioration of liquidity that has put a strain on working capital.

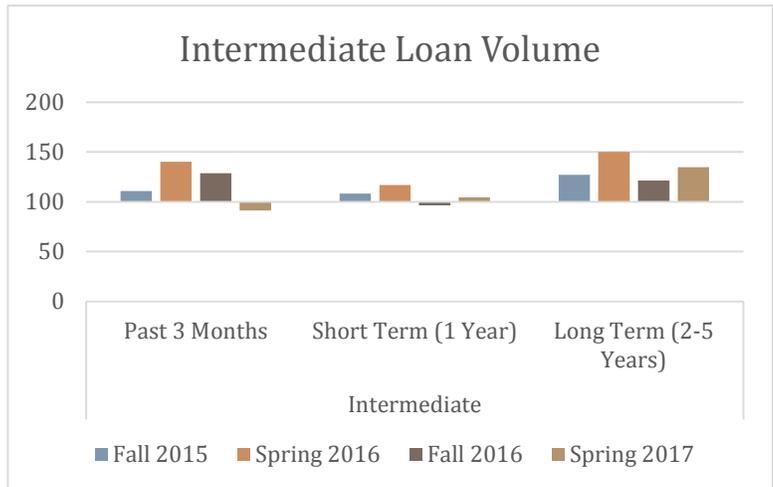
Lenders indicated a decrease in demand for intermediate loans for the first time since Spring of 2013. In previous surveys, respondents indicated that spending on machinery and equipment was slowing as liquidity positions worsened. Farmers are spending less on machinery and equipment. If liquidity positions continue to erode,



# AGRICULTURAL LENDER SURVEY

demand for intermediate loans may increase with farmers selling unused or lightly used equipment that is not vital to the farm's core functions. In this scenario, there may be farmers buying some assets at discounted prices if those farmers are not liquidity constrained.

The historical responses to farm loan volume are at the back of this document in Figure A3.



“We do not have as much troubled debt, as expected, even with low grain prices.”

“Increased loan volume has been driven by a strain on working capital over the past year. Producers are either needing larger operating lines because they will have less equity in the crop, or they are being driven to refinance real estate to replenish working capital.”

Spring 2017 Survey Respondents

# AGRICULTURAL LENDER SURVEY

## Non-Performing Loans

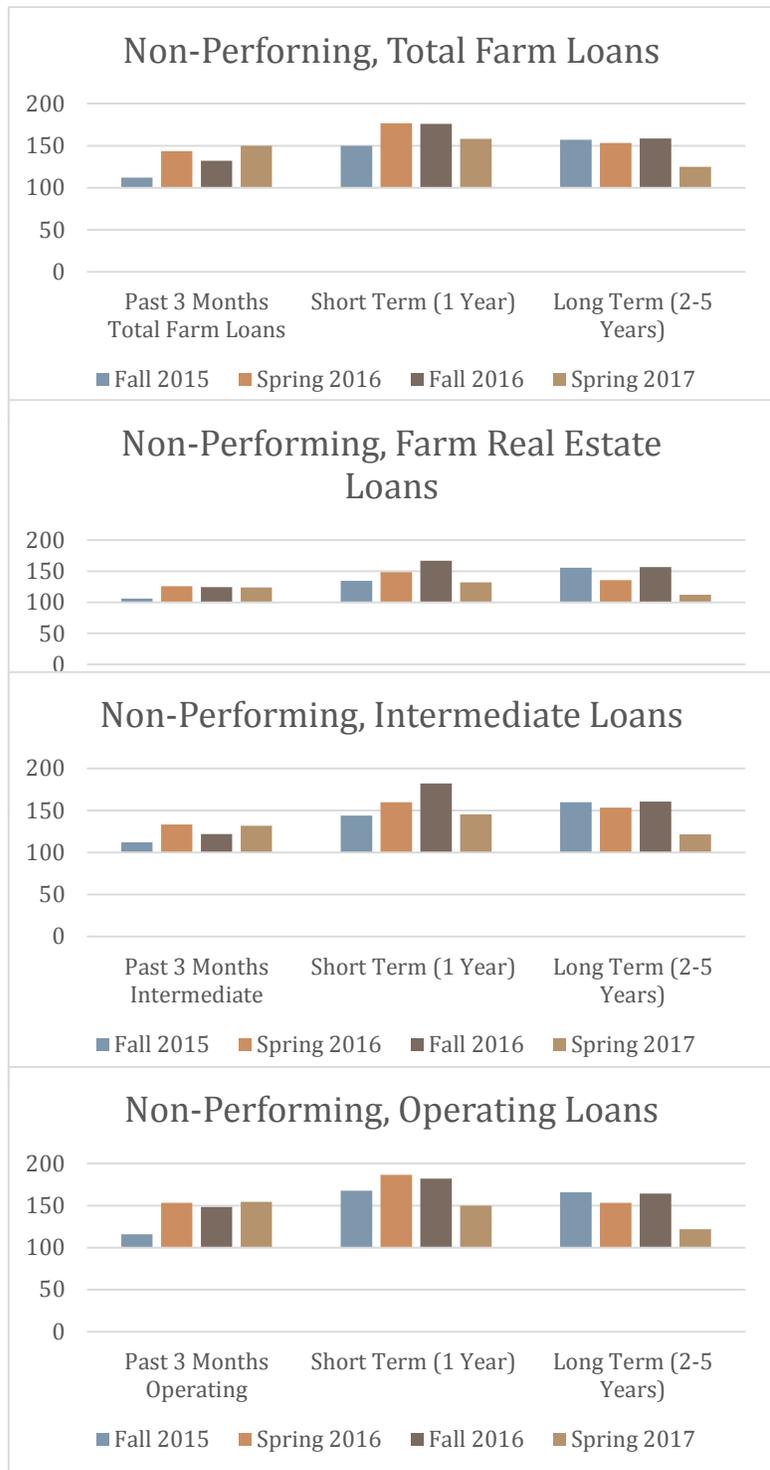
Survey respondents are asked about their expectations of non-performing loans from two aspects. The first is by their expectation depending on the type of loan and the second is by the sector of the agricultural economy in which the loan was made.

### BY LOAN TYPE

Lenders expect an increase in non-performing loans for all loan types in both the short and long term. Lenders also reported an increase in non-performing loans over the past three months for all types of loans. These results coincide with deteriorating liquidity and capital positions of farmers.

Many lenders indicated that farmers were able to refinance farm real estate debt to avoid liquidation or non-payment this year by amortizing the unpaid debt over 3 to 5 years. This could present issues if these same farmers fail to meet operating loans expectations for the 2017 crop year.

The historical responses to non-performing loans are at the back of this document in Figure A4.



# AGRICULTURAL LENDER SURVEY

## BY CROP SECTOR

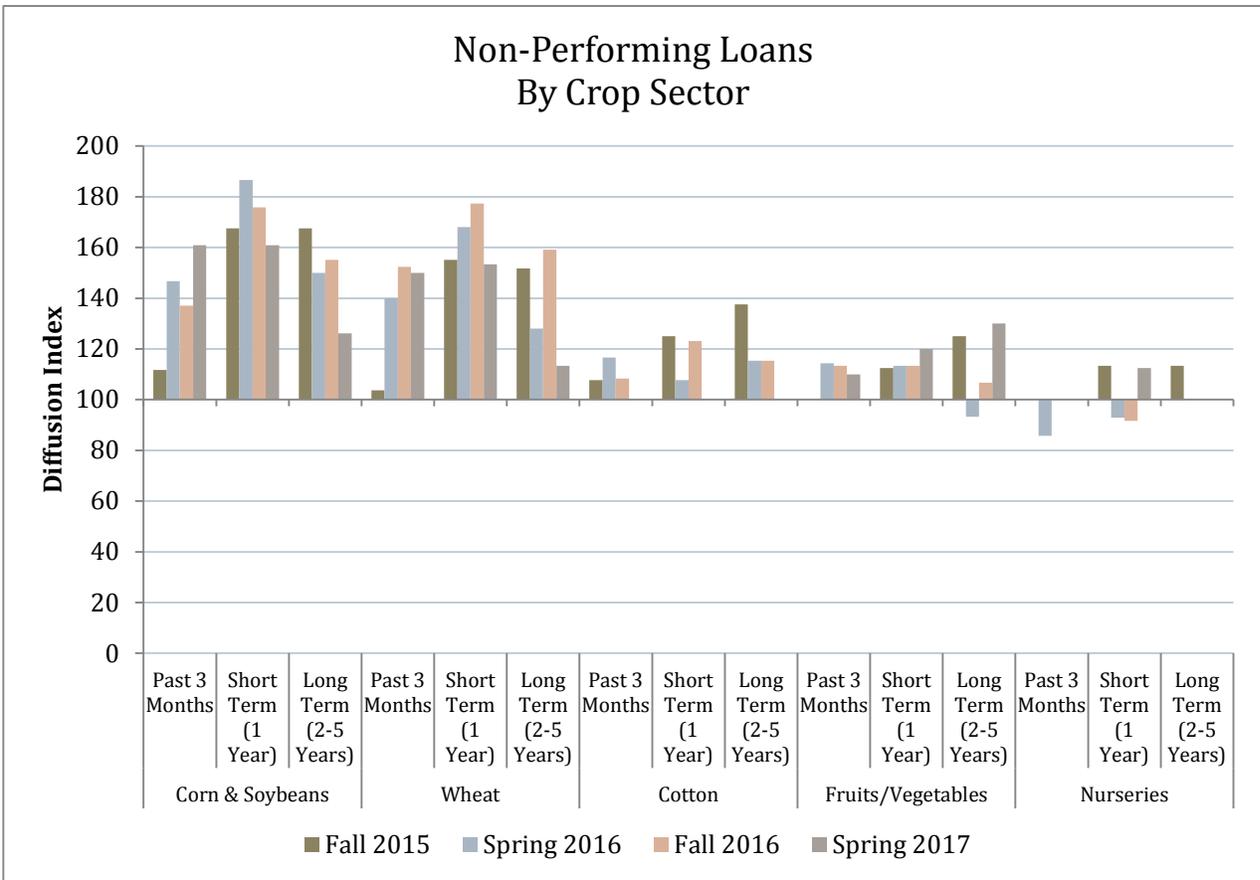
Lender expectations for non-performing loans by crop sector are not much different than by loan type: lenders expect an increase in non-performing loans. However, this sentiment is stronger for some crops than others.

In the past three months, the largest increases for non-performing loans are attributable to corn and soybeans and wheat loans. Increases for cotton and fruit/vegetables remain low.

In the short and long term, lenders expect the highest increases in non-performing loans to be in the corn and soybean and wheat commodities. In the short term, above average crops have offset the decline in commodity prices for corn and soybeans. However, this harvest across commodities has caused stocks to increase resulting in depressed prices in the longer term.

“We have had a few instances of carry-over debt, which we have restructured over a 3-5 year amortization.”

Spring 2017 Survey Respondent



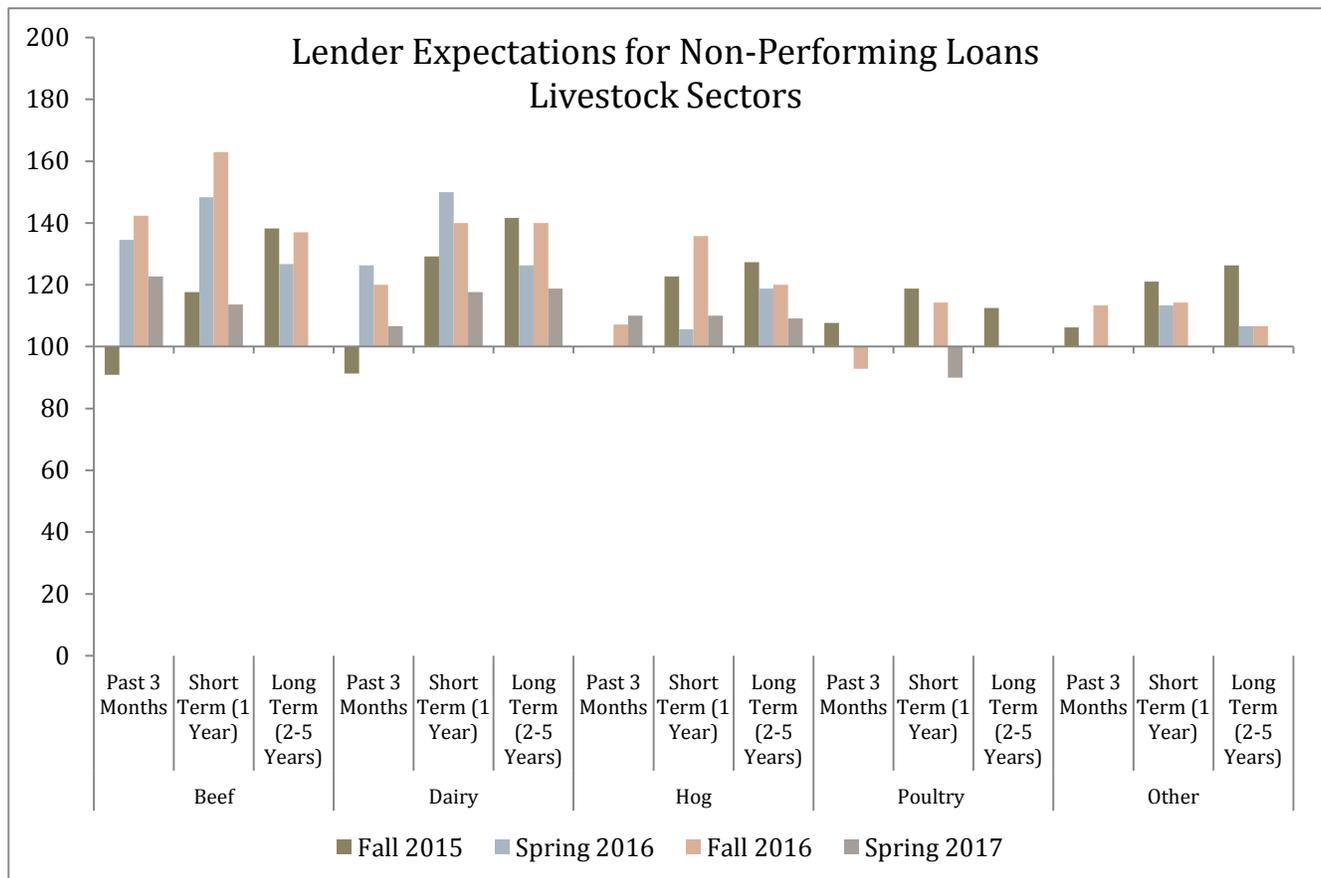
# AGRICULTURAL LENDER SURVEY

## BY LIVESTOCK SECTOR

Livestock sectors, a bright spot a year ago, are also experiencing cash flow issues this fall but have rebounded with an upward trend in prices recently. Lenders reported an increase in non-performing loans for beef, dairy and hog operations, but these increases were not as high as in the fall for beef and dairy. Lender expectations for both the short and long term are for this trend of increasing non-performing loans to continue.

“It feels like we are past the worst in beef finishing and backgrounding sectors. Most Midwestern feedyards are now at a point where they can place cattle with hedgeable positive margins. There has been a run in fed cattle cash pricing this spring and most feeders have been selling cattle that make money over the past few months. This run was driven by lower than average placements last fall. It feels like placements are now catching up and are higher than average for this time of the year.”

Spring 2017 Survey Respondent



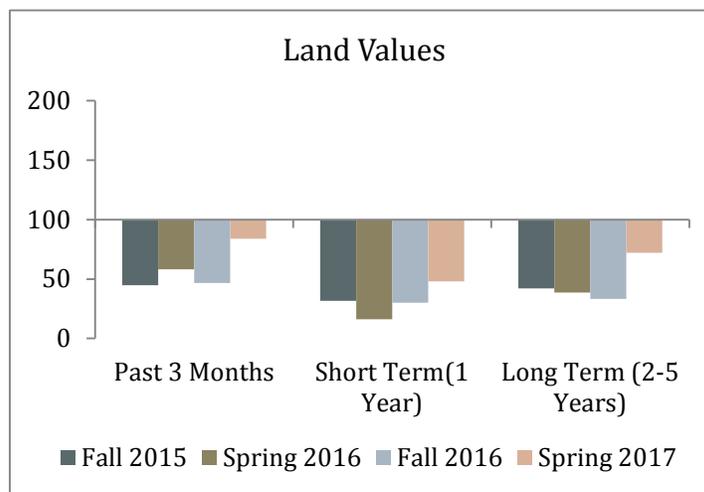
# AGRICULTURAL LENDER SURVEY

## Land Values

Over the past three months, 24% of lenders reported a decrease in land values in their loan service territory. This is down from 57% in the Fall 2016 survey. Overall, more lenders reported no change in land values (68%). Overall, lenders expect this trend of declining land values to continue, but this sentiment is not as strong as in previous surveys.

As noted previously, non-performing loans were not as high as some were expecting, but this is partly due to the collateralization of equity for unpaid debts. If land values do continue to fall, this may present problems for more farmers who are unable to pay their 2017 operating loans. Also, as mentioned by the survey respondent below, some farmers have been slow to adjust to the lower commodity prices which could put further strain on liquidity positions.

The historical responses to land values are at the back of this document in Figure A7.



“The majority of our Ag borrowers are adjusting to the new norm in commodity prices. Unfortunately, some borrowers are not being realistic about the present and the foreseeable future. The future looks bleak for that small number of producers who are unable to come to grips with reality. Time will tell.”

Spring 2017 Survey Respondent

## Author Information

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# AGRICULTURAL LENDER SURVEY

**Table A1, States in Each Region**

<b>Atlantic</b>	CT, DE, KY, ME, MD, MA, NH, NJ, NY, NC, PA, RI, TN, VA, VT, WV
<b>South</b>	AL, AR, FL, GA, LA, MS, SC
<b>Midwest</b>	IA, IL, IN, MI, MN, MO, OH, WI
<b>Plains</b>	KS, NE, ND, OK, SD, TX
<b>West</b>	AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY

# AGRICULTURAL LENDER SURVEY

**Table A2, Respondent Responses**

		Interest Rates									Spread Over Cost of Funds								
		Farm Real Estate			Intermediate			Operating			Farm Real Estate			Intermediate			Operating		
		Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher
Past Three Months	Spring 2013	55%	42%	3%	52%	43%	2%	48%	50%	0%	56%	35%	10%	56%	37%	6%	58%	39%	3%
	Fall 2013	17%	44%	39%	12%	58%	30%	18%	70%	12%	36%	56%	8%	30%	61%	9%	32%	61%	7%
	Spring 2014	14%	67%	19%	13%	78%	30%	16%	50%	5%	28%	67%	5%	24%	71%	5%	23%	71%	5%
	Fall 2014	14%	74%	12%	12%	78%	7%	15%	44%	7%	30%	65%	5%	29%	68%	2%	32%	63%	5%
	Spring 2015	19%	76%	5%	11%	89%	0%	11%	89%	0%	30%	70%	0%	26%	74%	0%	25%	75%	0%
	Fall 2015	5%	79%	13%	8%	78%	11%	11%	81%	6%	32%	63%	3%	22%	72%	3%	25%	69%	3%
	Spring 2016	3%	52%	45%	0%	57%	43%	0%	50%	50%	10%	77%	13%	13%	77%	10%	13%	67%	20%
	Fall 2016	10%	80%	10%	4%	86%	11%	0%	86%	14%	27%	67%	7%	25%	64%	11%	14%	71%	14%
Spring 2017	0%	28%	72%	0%	26%	74%	0%	27%	73%	20%	56%	24%	17%	48%	35%	18%	36%	45%	
Short Term	Spring 2013	11%	75%	14%	14%	72%	12%	17%	73%	9%	48%	51%	3%	46%	54%	2%	43%	52%	3%
	Fall 2013	0%	44%	56%	0%	51%	49%	0%	65%	35%	22%	56%	22%	19%	58%	23%	23%	54%	23%
	Spring 2014	5%	50%	45%	5%	50%	45%	7%	53%	40%	32%	60%	9%	31%	58%	11%	27%	60%	13%
	Fall 2014	2%	44%	53%	2%	46%	51%	2%	50%	48%	23%	63%	14%	22%	66%	12%	22%	61%	17%
	Spring 2015	0%	43%	57%	0%	40%	60%	0%	39%	61%	24%	57%	19%	20%	69%	11%	22%	61%	17%
	Fall 2015	0%	34%	66%	0%	42%	58%	0%	32%	13%	24%	58%	18%	27%	51%	22%	31%	44%	25%
	Spring 2016	0%	32%	68%	0%	30%	70%	0%	27%	73%	6%	68%	26%	7%	60%	33%	3%	57%	40%
	Fall 2016	3%	40%	57%	0%	43%	57%	0%	32%	68%	20%	67%	13%	18%	68%	14%	14%	71%	14%
Spring 2017	0%	8%	92%	0%	9%	91%	0%	9%	91%	24%	40%	36%	17%	43%	39%	18%	36%	45%	
Long Term	Spring 2013	2%	14%	85%	2%	9%	88%	2%	8%	89%	31%	34%	38%	30%	29%	38%	27%	32%	40%
	Fall 2013	0%	19%	81%	0%	21%	79%	0%	19%	81%	14%	42%	44%	12%	42%	46%	14%	44%	42%
	Spring 2014	0%	5%	95%	0%	4%	96%	0%	7%	93%	26%	42%	32%	27%	44%	29%	25%	42%	33%
	Fall 2014	0%	5%	95%	0%	7%	93%	0%	7%	93%	16%	47%	37%	27%	46%	39%	15%	44%	41%
	Spring 2015	0%	8%	92%	0%	9%	91%	0%	6%	94%	22%	35%	43%	23%	40%	37%	22%	33%	44%
	Fall 2015	0%	3%	97%	0%	3%	97%	0%	3%	97%	16%	42%	42%	16%	43%	41%	19%	38%	43%
	Spring 2016	0%	3%	97%	0%	3%	97%	0%	3%	97%	16%	35%	48%	13%	37%	50%	13%	33%	53%
	Fall 2016	0%	20%	80%	0%	21%	79%	0%	18%	82%	23%	47%	30%	18%	54%	29%	21%	46%	32%
Spring 2017	0%	4%	96%	0%	9%	91%	0%	9%	91%	12%	60%	28%	13%	57%	30%	14%	50%	36%	

# AGRICULTURAL LENDER SURVEY

## Table A2 Continued, Respondent Responses

# AGRICULTURAL LENDER SURVEY

		Farm Dollar Volume											
		Total Farm Loans			Farm Real Estate			Intermediate			Operating		
		Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher
Past Three Months	Spring 2013	32%	22%	45%	12%	35%	52%	28%	46%	22%	40%	26%	31%
	Fall 2013	5%	46%	49%	7%	51%	42%	9%	66%	25%	12%	54%	33%
	Spring 2014	20%	32%	48%	9%	41%	50%	16%	56%	27%	29%	35%	36%
	Fall 2014	12%	35%	53%	16%	40%	44%	20%	44%	37%	12%	29%	59%
	Spring 2015	5%	38%	57%	14%	54%	32%	11%	43%	46%	8%	42%	50%
	Fall 2015	5%	27%	68%	8%	53%	39%	8%	70%	19%	3%	22%	72%
	Spring 2016	0%	33%	67%	10%	42%	48%	7%	47%	47%	7%	23%	70%
	Fall 2016	3%	38%	59%	13%	47%	40%	7%	57%	36%	4%	29%	68%
	Spring 2017	17%	38%	46%	8%	40%	52%	26%	57%	17%	5%	45%	50%
Short Term	Spring 2013	9%	43%	46%	8%	43%	49%	9%	58%	28%	6%	50%	42%
	Fall 2013	0%	41%	59%	8%	46%	46%	5%	56%	39%	5%	40%	54%
	Spring 2014	2%	21%	77%	3%	38%	59%	22%	29%	49%	4%	24%	73%
	Fall 2014	9%	35%	56%	19%	49%	33%	17%	41%	41%	7%	24%	68%
	Spring 2015	5%	27%	68%	22%	43%	35%	20%	43%	37%	3%	25%	72%
	Fall 2015	3%	14%	81%	13%	47%	37%	24%	41%	32%	0%	14%	83%
	Spring 2016	0%	33%	67%	16%	29%	55%	20%	43%	37%	7%	23%	70%
	Fall 2016	7%	34%	59%	17%	23%	60%	29%	46%	25%	11%	39%	50%
	Spring 2017	8%	42%	50%	8%	44%	48%	26%	43%	30%	0%	59%	41%
Long Term	Spring 2013	9%	25%	65%	15%	29%	55%	19%	30%	48%	5%	28%	65%
	Fall 2013	2%	36%	63%	8%	42%	49%	5%	47%	47%	4%	33%	63%
	Spring 2014	0%	21%	79%	7%	29%	64%	7%	39%	54%	0%	29%	71%
	Fall 2014	5%	23%	72%	14%	19%	67%	15%	30%	56%	17%	17%	76%
	Spring 2015	3%	27%	70%	11%	35%	54%	8%	28%	64%	0%	28%	72%
	Fall 2015	8%	19%	70%	18%	21%	58%	14%	43%	41%	3%	11%	83%
	Spring 2016	0%	23%	77%	16%	29%	55%	10%	30%	60%	3%	20%	77%
	Fall 2016	3%	31%	66%	10%	30%	60%	18%	43%	39%	4%	29%	68%
	Spring 2017	13%	21%	67%	12%	24%	64%	17%	30%	52%	5%	27%	68%

# AGRICULTURAL LENDER SURVEY

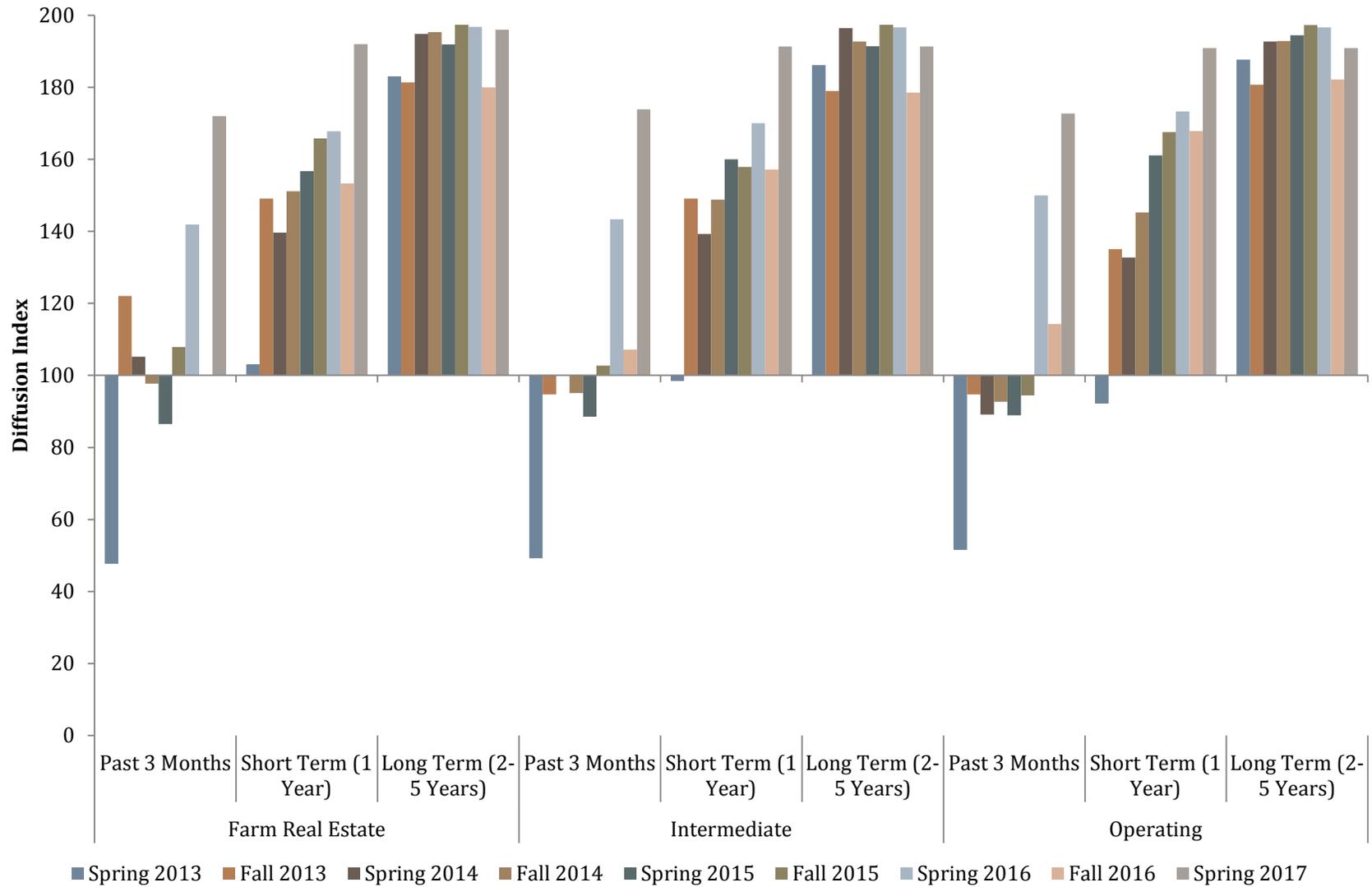
# AGRICULTURAL LENDER SURVEY

**Table A2 Continued, Respondent Responses**

		Non-Performing Loan by Loan Type												Ag Land Values		
		Total Farm Loans			Farm Real Estate			Intermediate			Operating			Lower	Same	Higher
		Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher			
Past Three Months	Spring 2013	28%	58%	0%	27%	63%	0%	27%	61%	0%	24%	63%	3%			
	Fall 2013	31%	67%	2%	24%	74%	2%	29%	69%	2%	27%	69%	4%	0%	61%	39%
	Spring 2014	27%	71%	2%	28%	68%	4%	20%	78%	2%	20%	76%	4%	14%	50%	36%
	Fall 2014	32%	68%	0%	29%	68%	3%	29%	71%	0%	26%	66%	9%	14%	69%	17%
	Spring 2015	3%	91%	6%	3%	97%	0%	3%	91%	6%	3%	88%	9%	35%	57%	8%
	Fall 2015	0%	85%	12%	3%	86%	9%	0%	85%	12%	0%	81%	16%	58%	37%	3%
	Spring 2016	0%	57%	43%	0%	74%	26%	0%	67%	33%	0%	47%	53%	48%	45%	6%
	Fall 2016	0%	68%	32%	0%	76%	24%	0%	78%	22%	0%	52%	48%	57%	40%	3%
	Spring 2017	8%	33%	58%	8%	60%	32%	5%	59%	36%	5%	36%	59%	24%	68%	8%
Short Term	Spring 2013	28%	58%	3%	30%	64%	3%	26%	65%	3%	30%	61%	7%			
	Fall 2013	18%	70%	13%	15%	80%	5%	17%	74%	9%	13%	72%	15%	17%	61%	22%
	Spring 2014	9%	69%	22%	9%	71%	20%	9%	74%	17%	8%	63%	29%	33%	52%	16%
	Fall 2014	5%	49%	46%	5%	68%	27%	5%	67%	28%	5%	38%	56%	48%	45%	7%
	Spring 2015	3%	49%	49%	3%	68%	30%	3%	57%	40%	3%	47%	50%	59%	41%	0%
	Fall 2015	3%	41%	53%	3%	57%	37%	3%	47%	47%	3%	24%	71%	71%	24%	3%
	Spring 2016	0%	23%	77%	6%	39%	55%	3%	33%	63%	0%	13%	87%	84%	16%	0%
	Fall 2016	0%	24%	76%	0%	33%	67%	0%	18%	82%	0%	18%	82%	73%	23%	3%
	Spring 2017	8%	25%	67%	8%	52%	40%	9%	36%	55%	9%	32%	59%	56%	40%	4%
Long Term	Spring 2013	19%	56%	20%	21%	62%	17%	16%	65%	18%	16%	63%	19%			
	Fall 2013	14%	46%	40%	12%	49%	39%	11%	53%	36%	11%	45%	45%	46%	44%	10%
	Spring 2014	7%	40%	53%	7%	41%	52%	6%	48%	46%	4%	42%	54%	59%	29%	12%
	Fall 2014	10%	33%	57%	10%	45%	45%	12%	44%	44%	13%	33%	55%	64%	26%	10%
	Spring 2015	3%	35%	62%	3%	49%	49%	3%	42%	56%	3%	27%	70%	65%	32%	3%
	Fall 2015	6%	29%	63%	6%	31%	61%	6%	26%	66%	6%	20%	71%	66%	24%	8%
	Spring 2016	10%	27%	63%	16%	32%	52%	10%	27%	63%	10%	27%	63%	68%	26%	6%
	Fall 2016	3%	34%	62%	3%	37%	60%	4%	32%	64%	4%	29%	68%	70%	27%	3%
	Spring 2017	17%	42%	42%	16%	56%	28%	13%	52%	35%	17%	43%	39%	36%	56%	8%

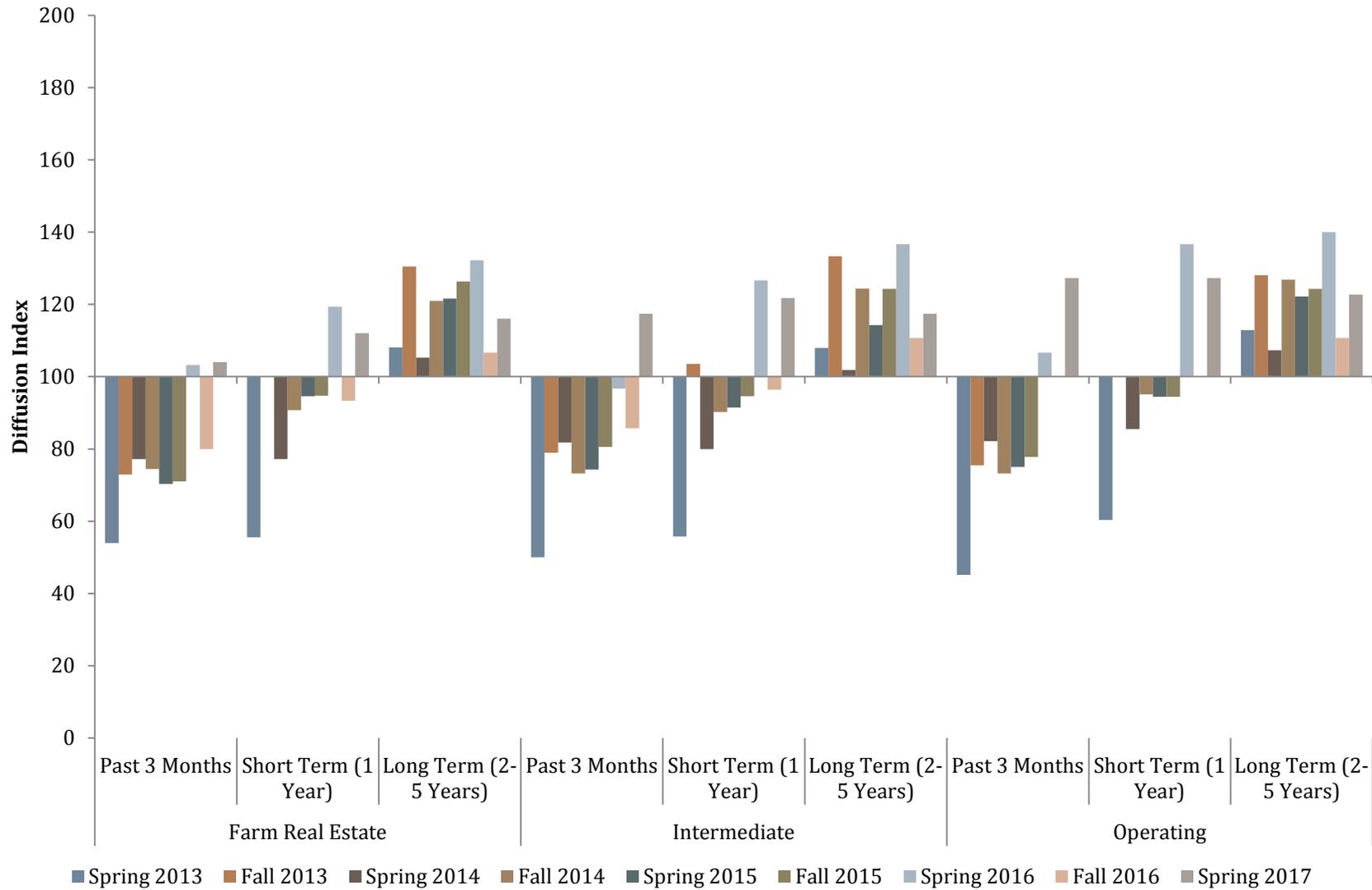
# AGRICULTURAL LENDER SURVEY

## Figure A1, Historical Responses Lender Expectation of Interest Rates



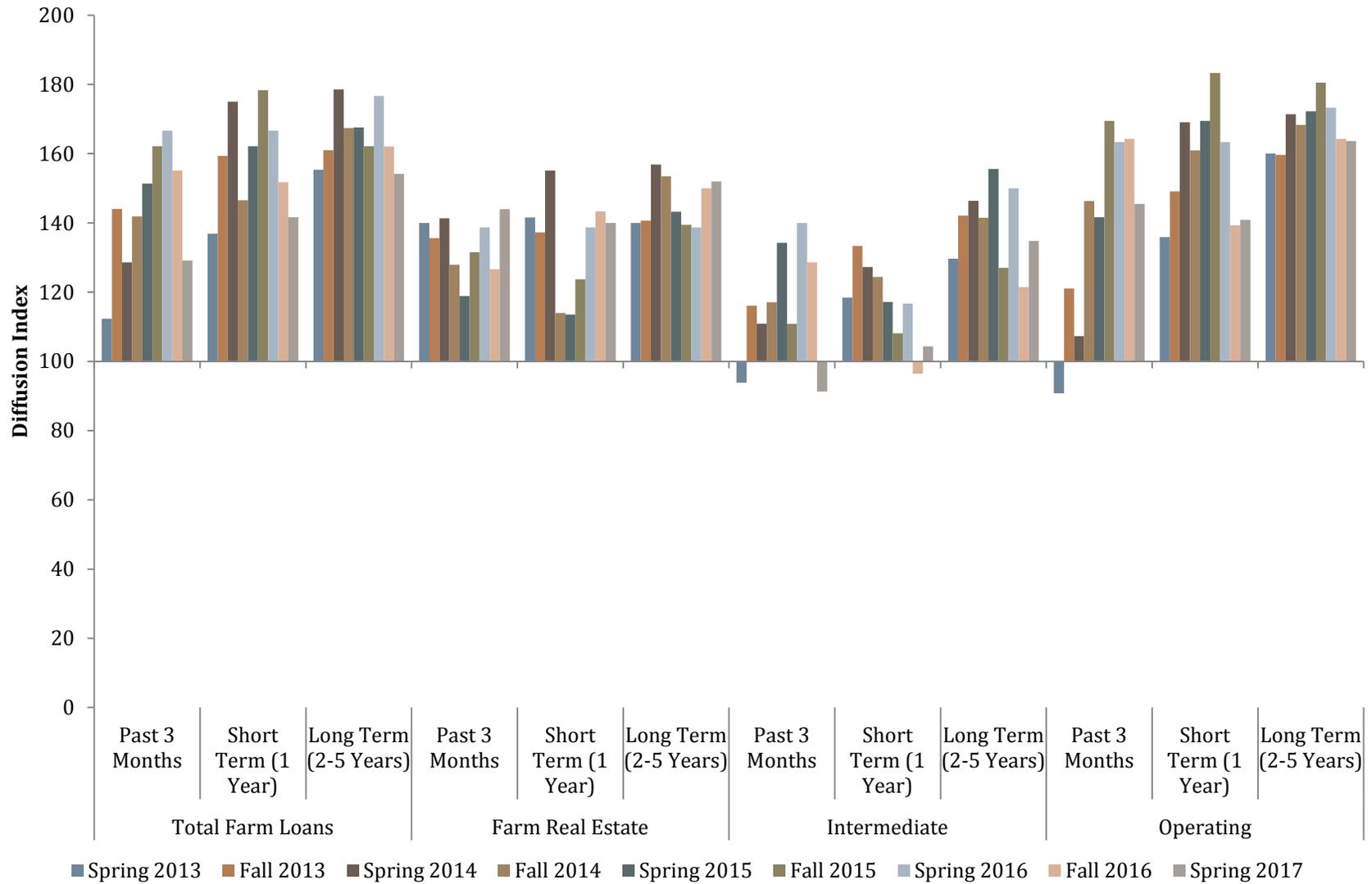
# AGRICULTURAL LENDER SURVEY

## Figure A2, Historical Responses Spread Over Cost of Funds



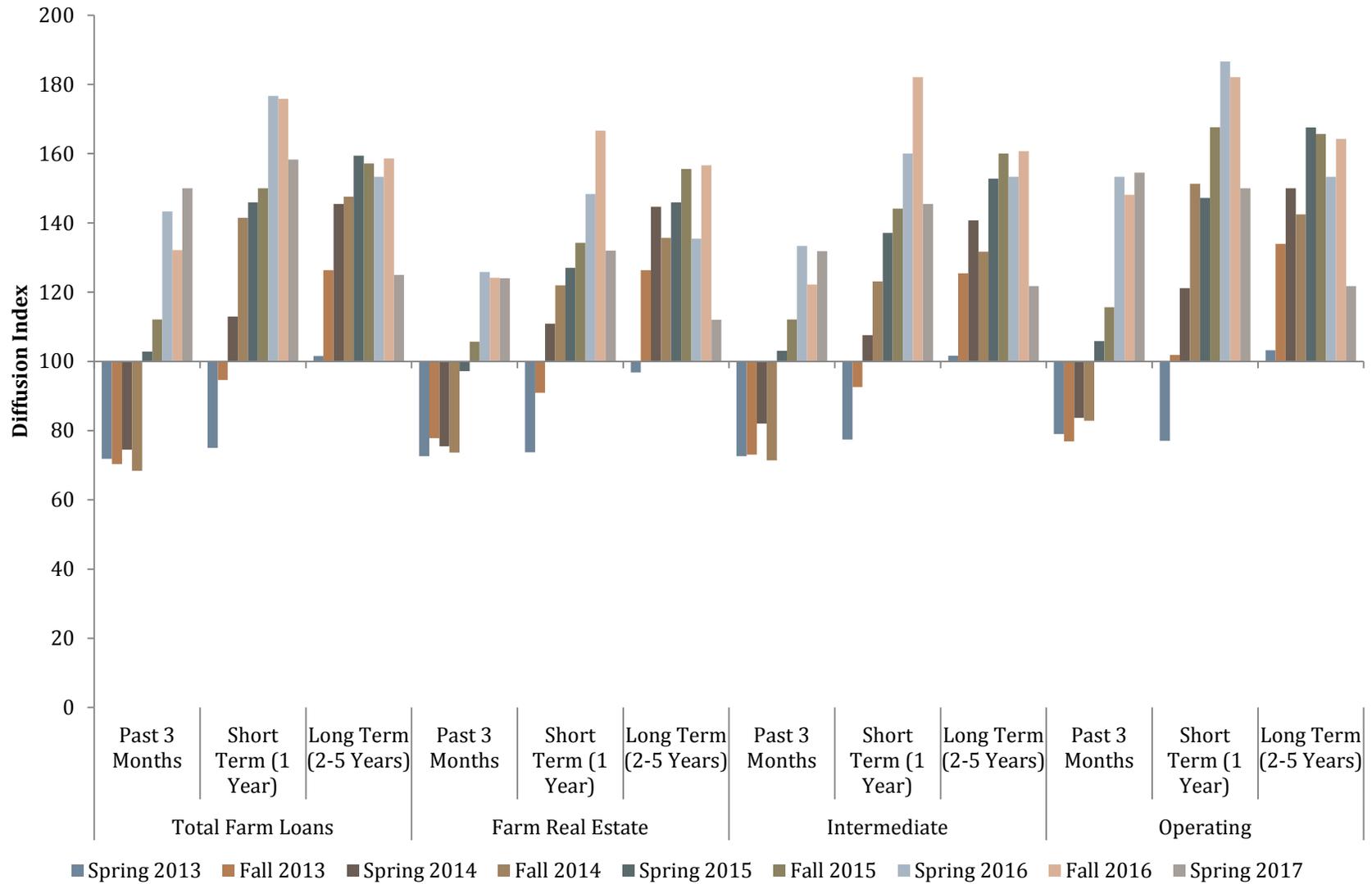
# AGRICULTURAL LENDER SURVEY

## Figure A3, Historical Responses Farm Dollar Volume



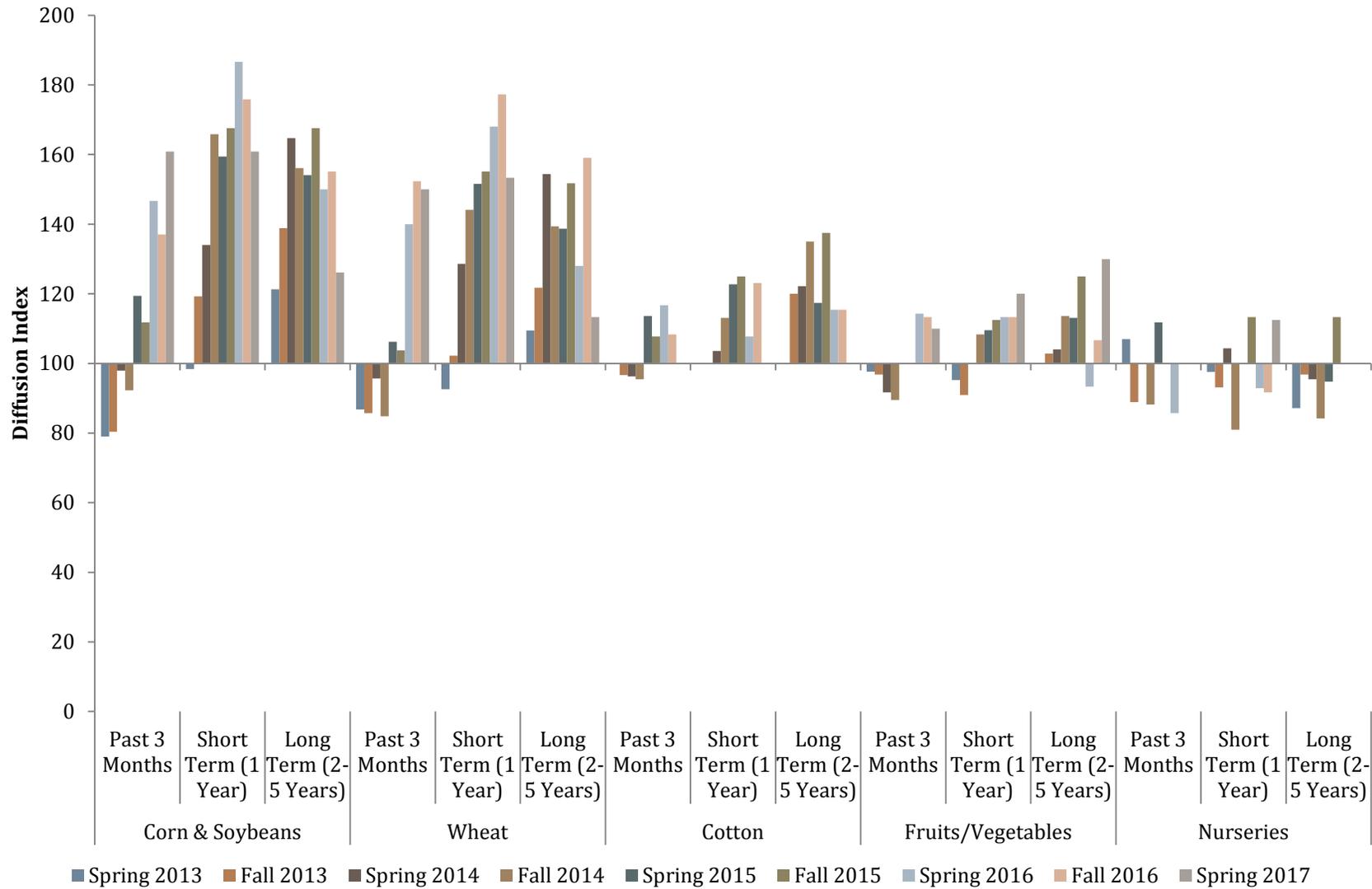
# AGRICULTURAL LENDER SURVEY

## Figure A4, Historical Responses Non-Performing Loans by Loan Type



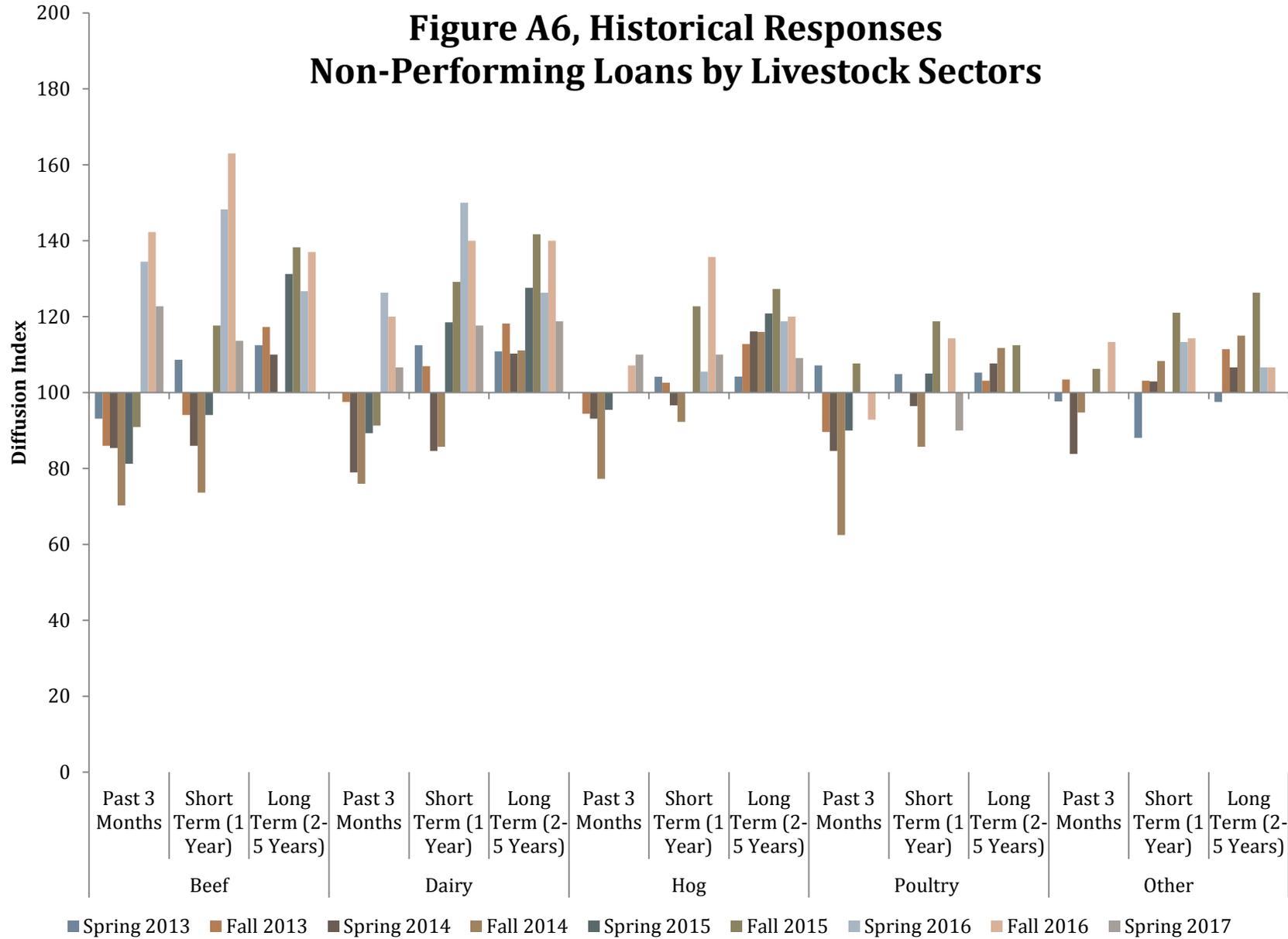
# AGRICULTURAL LENDER SURVEY

## Figure A5, Historical Responses Non-Performing Loans by Crop Sector



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## Figure A6, Historical Responses Non-Performing Loans by Livestock Sectors



# AGRICULTURAL LENDER SURVEY

## Figure A7, Historical Responses Land Values

